Section 2
1999 Crash Participants, Injured Persons and Fatalities

TABLES

FIGURES

Injured Persons and Fatalities 1969 - 1999

The trends in injuries and fatalities for the past thirty years are shown in Table 2.01. During this time period over 600,000 people have been injured and almost 10,000 people have been killed in a crash.

In 1999, the injured person rate per 100 million vehicle miles traveled (MVMT) was 137.0. This was a 4% decrease from the 1998 rate of 142.4. The lowest fatality rate occurred in 1998 and 1999 at 1.6, which was a slight decrease from 1.8 in 1997.

Table 2.01 Injured Persons and Fatalities, Utah 1969-1999

Year	Million Vehicle Miles Traveled (MVMT)	Injuries	Fatalities	Injury Rate per 100 MVMT	Fatality Rate per 100 MVMT
1969	5,802	15,977	308	275.4	5.3
1970	6,108	17,076	335	279.6	5.5
1971	6,544	18,073	337	276.2	5.1
1972	6,969	18,261	382	262.0	5.5
1973	7,274	18,415	361	253.2	5.0
1974	7,457	16,268	228	218.2	3.1
1975	7,942	17,762	274	223.6	3.5
1976	8,420	18,315	254	217.5	3.0
1977	9,054	19,728	360	217.9	4.0
1978	9,826	21,029	376	214.0	3.8
1979	9,811	20,798	328	212.0	3.3
1980	10,645	17,828	335	167.5	3.1
1981	10,733	18,090	364	168.5	3.4
1982	10,947	17,538	296	160.2	2.7
1983	11,228	18,910	283	168.4	2.5
1984	11,642	20,487	315	176.0	2.7
1985	12,035	21,346	303	177.4	2.5
1986	12,253	21,350	312	174.2	2.5
1987	12,679	19,237	297	151.7	2.3
1988	13,263	19,066	297	143.8	2.2
1989	13,915	19,843	303	142.6	2.2
1990	14,646	20,608	272	140.7	1.9
1991	15,390	19,540	271	127.0	1.8
1992	16,263	22,490	269	138.3	1.7
1993	17,055	25,763	303	151.1	1.8
1994	18,080	28,436	343	157.3	1.9
1995	18,786	28,343	325	150.9	1.7
1996	19,433	30,711	328	158.0	1.7
1997	20,408	31,238	366	153.1	1.8
1998	21,237	30,232	350	142.4	1.6
1999	21,867	29,959	360	137.0	1.6
Total	387,712	662,717	9,835	170.9	2.5

Injured Persons and Fatalities
1969 - 1999

Figures 2.01 reflects the trends in rates of persons injured in crashes per 100 million vehicle miles traveled (MVMT) from 1969 to 1999. The injury rates were highest in the early 1970s.

Figure 2.01 Crash Injured Person Rates per Million Vehicle Miles Traveled, Utah 1969-1999

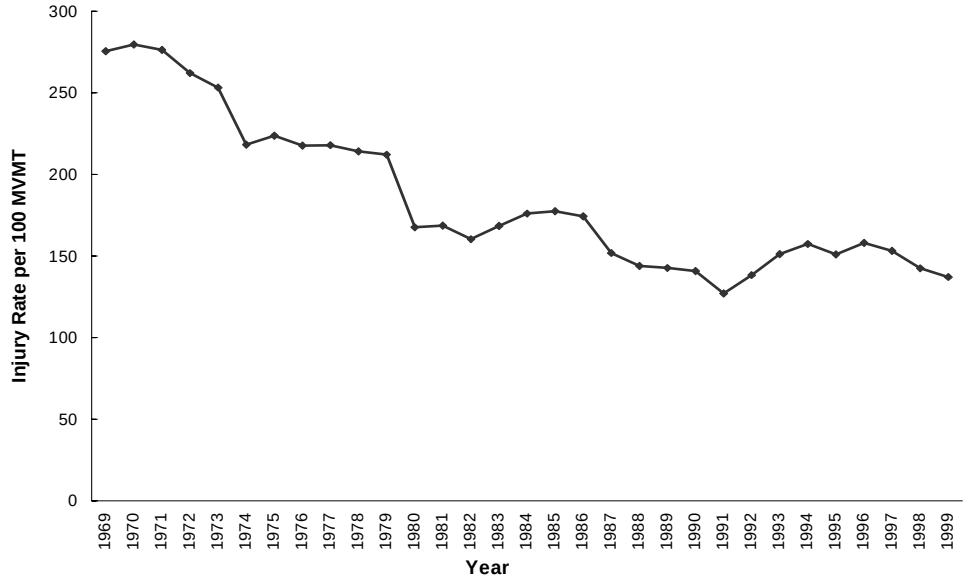
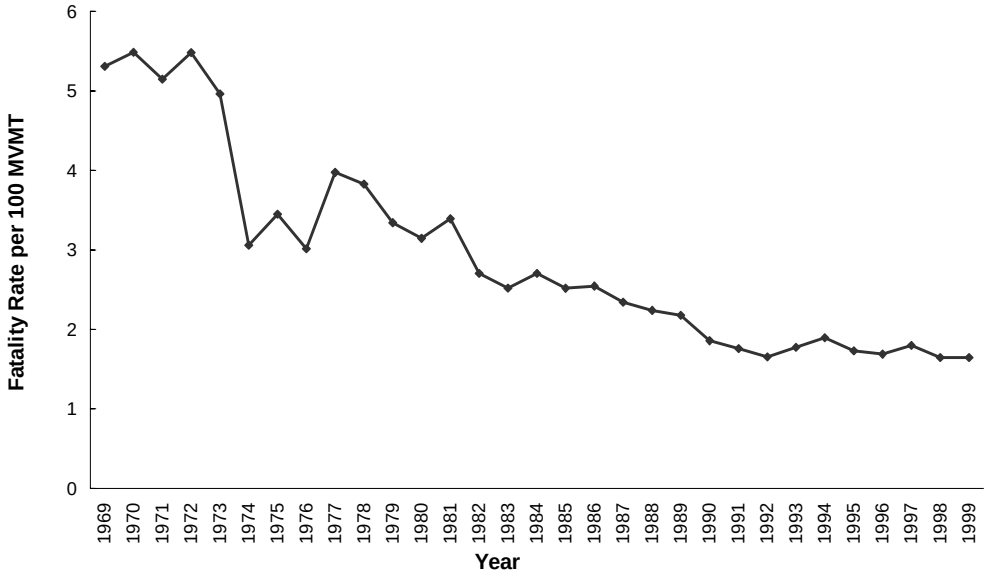


Figure 2.02 shows the trends in the rate of persons killed in crashes per 100 million vehicle miles traveled. The rate has markedly decreased from 5.1 persons killed per 100 MVMT in 1969 to 1.6 persons killed per 100 MVMT in 1999. The biggest decrease in fatalities occurred after the implementation of a 55 MPH speed limit in 1973.

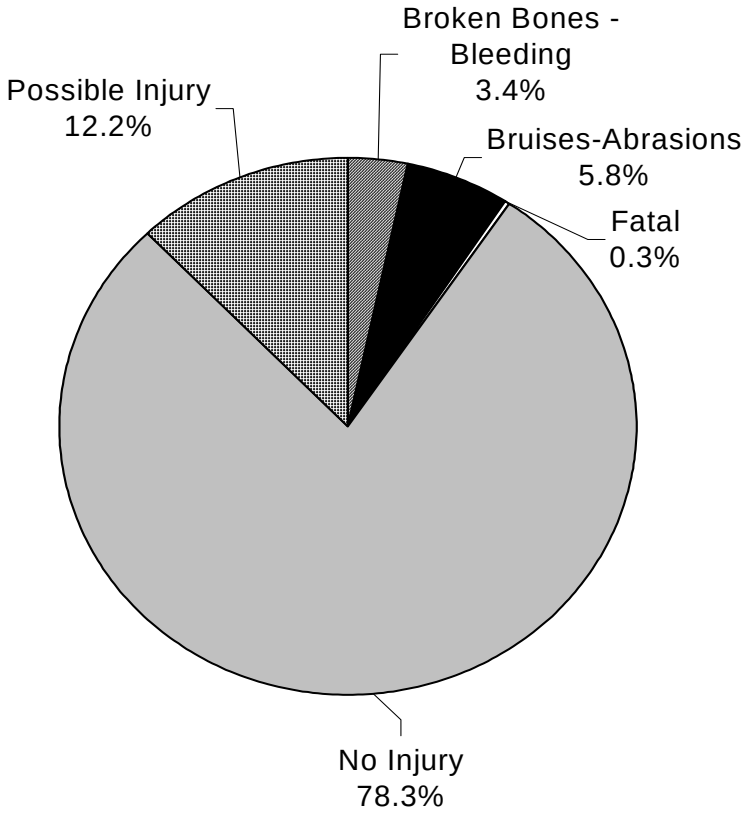
Figure 2.02 Crash Fatality Rates per Million Vehicle Miles Traveled, Utah 1969-1999



1999 Crash Injury Severity

The majority (78.3%) of total crash participants did not sustain any injury. Fatal crashes represented 0.6% of total crashes, yet a fatal injury was sustained by 0.3% of total crash participants. These facts indicate that individuals in the same crash have different injury experiences. Many factors influence injury patterns including seatbelt use, seat position, and vehicle safety equipment.

Figure 2.03 Severity of Injuries as Reported by Police, Utah 1999 (n=139,673)



1999 Crash Participants, Injured Persons and Fatalities by County

Figure 2.04 depicts the number of injuries and fatalities for each county. For rates of crash participants, injured persons and fatalities see Table 2.02.

Figure 2.04 Fatalities by County, Utah 1999

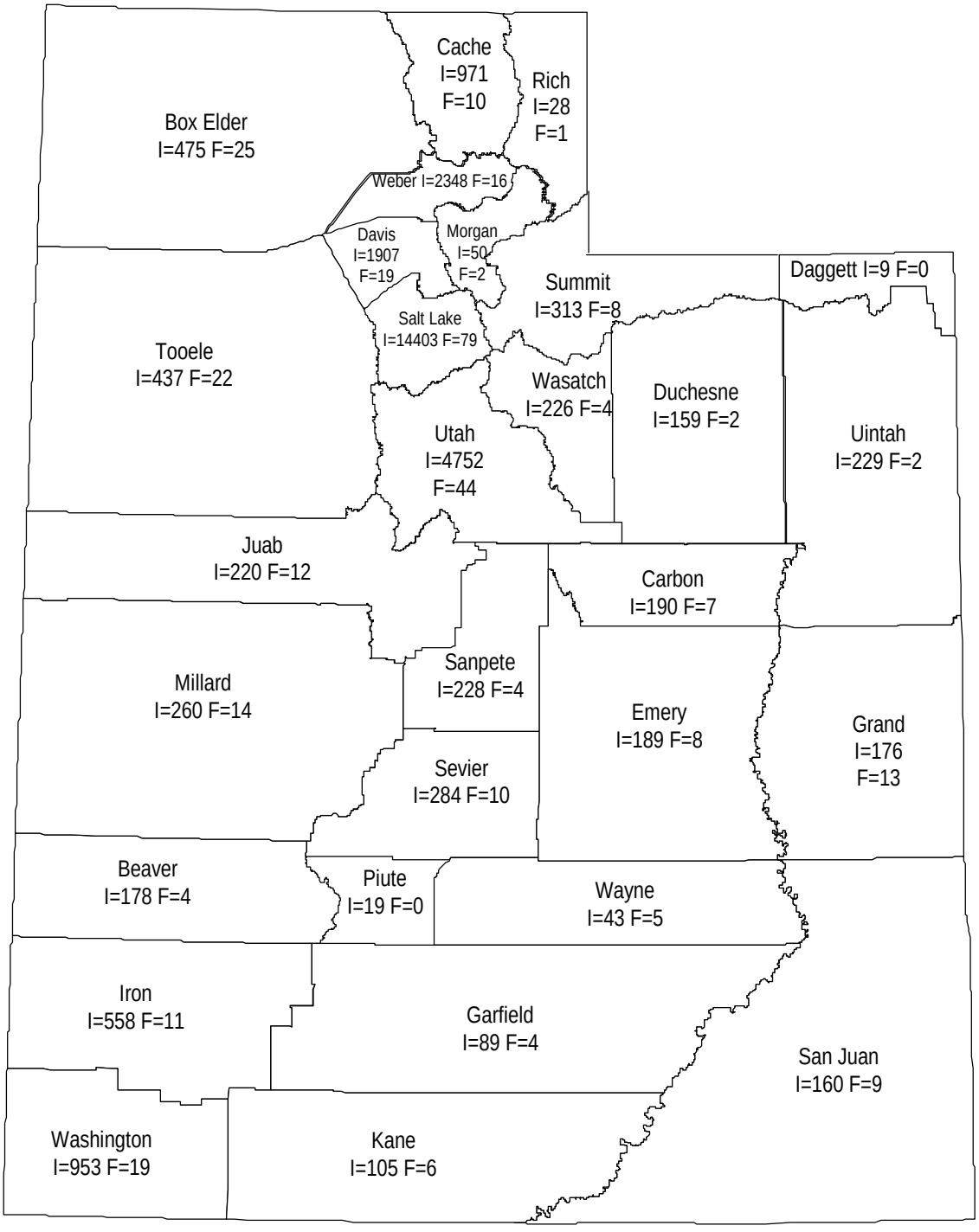


Table 2.02 shows the rates of crash participants, injured persons and fatalities for each county. Two different rates are given in Table 2.02; one based on population of the county, and the other on the miles traveled in the county. The leading counties for crash participants based on miles traveled were Salt Lake, Utah and Cache. The leading for injured persons were Salt Lake, Wayne and Sanpete. While the leading three for fatalities were Wayne, Kane, and Grand.

Table 2.02 Crash Participants, Injured Persons and Fatalities by County, Utah 1999

	Crash Participants			Injured Persons			Crash Fatalities		
County	#	Rate per 100 MVMT	Rate Per 10,000 Population	#	Rate per 100 MVMT	Rate Per 10,000 Population	#	Rate per 100 MVMT	Rate Per 10,000 Population
Beaver	647	3.1	964.5	178	8.6	265.4	4	1.9	6.0
Box Elder	1,833	2.1	436.8	475	5.4	113.2	25	2.9	6.0
Cache	5,366	7.1	580.3	971	1.3	105.0	10	1.3	1.1
Carbon	854	2.5	381.5	190	5.5	84.9	7	2.0	3.1
Daggett	55	2.4	651.7	9	0.4	106.6	0	0.0	0.0
Davis	11,290	5.6	487.8	1,907	9.4	82.4	19	0.9	0.8
Duchesne	635	3.5	443.2	159	0.9	111.0	2	1.1	1.4
Emery	626	1.8	563.1	189	5.5	170.0	8	2.3	7.2
Garfield	326	2.5	695.7	89	0.7	189.9	4	3.0	8.5
Grand	586	2.1	560.8	176	6.4	168.4	13	4.7	12.4
Iron	2,220	4.0	666.5	558	1.0	167.5	11	2.0	3.3
Juab	734	2.2	914.0	220	6.6	273.9	12	3.6	14.9
Kane	437	3.5	600.3	105	0.8	144.2	6	4.8	8.2
Millard	948	2.3	746.2	260	6.3	204.6	14	3.4	11.0
Morgan	241	2.1	348.8	50	0.4	72.4	2	1.7	2.9
Piute	69	2.3	420.0	19	6.2	115.6	0	0.0	0.0
Rich	185	3.9	989.8	28	0.6	149.8	1	2.1	5.4
Salt Lake	66,767	9.3	775.8	14,403	20.0	167.3	79	1.1	0.9
San Juan	655	2.6	488.7	160	0.6	119.4	9	3.5	6.7
Sanpete	840	3.6	383.8	228	9.9	104.2	4	1.7	1.8
Sevier	1,136	3.0	590.5	284	0.8	147.6	10	2.7	5.2
Summit	1,650	2.8	620.6	313	5.3	117.7	8	1.4	3.0
Tooele	1,622	2.6	468.6	437	0.7	126.2	22	3.5	6.4
Uintah	1,132	4.2	458.1	229	8.4	92.7	2	0.7	0.8
Utah	22,280	7.6	656.7	4,752	1.6	140.1	44	1.5	1.3
Wasatch	1,176	4.9	840.2	226	9.4	161.5	4	1.7	2.9
Washington	4,822	5.8	581.9	953	1.1	115.0	19	2.3	2.3
Wayne	161	4.0	626.7	43	10.6	167.4	5	12.3	19.5
Weber	10,380	7.0	554.4	2,348	1.6	125.4	16	1.1	1.3
Grand Total	139,673	6.4	654.1	29,959	13.7	140.3	360	1.6	1.7

1999 Characteristics of Crash Participants,

Table 2.03 contains the injury levels by participant placement in the crash. Pedestrians involved in a crash were at the greatest risk for a fatal injury. In fact, pedestrians were 21 times more likely than other crash participants to sustain a fatal injury. For occupants, the back seat provided more protection against fatal injury. Front seat passengers were 1.6 times more likely than back seat passengers to sustain a fatal injury.

Table 2.03 Injury Severity by Participants Placement in the Crash, Utah 1999

Participant Placement	Crash Participants		Injured Persons		Crash Fatalities	
	#	%	#	%	#	%
Driver	95,922	68.7%	18,707	62.4%	208	51.6%
Front Seat Passenger	24,950	17.9%	6,390	21.3%	68	24.0%
Back Seat Passenger	16,642	11.9%	3,129	10.4%	29	9.8%
Cargo Area	273	0.2%	75	0.3%	4	0.8%
Pedestrian	818	0.6%	748	2.5%	38	10.7%
Bicyclist	855	0.6%	777	2.6%	7	0.8%
Other	213	0.2%	133	0.4%	6	2.2%
Grand Total	139,673	100.0%	29,959	100.0%	360	100.0%

The gender breakdown of crash participants is found in Table 2.04. Over half of the crash participants were male (54.7%). Males sustained fatal injuries at a slightly higher percentage than females; while female crash participants were more likely to sustain an injury than male crash participants.

Table 2.04 Gender of Crash Participants, Injured Persons and Fatalities, Utah 1999

Gender	Crash Participants		Injured Persons		Crash Fatalities	
	#	%	#	%	#	%
Female	61,138	43.8%	15,743	52.5%	127	41.5%
Male	76,395	54.7%	14,070	47.0%	233	58.5%
Missing	2,140	1.5%	146	0.5%	0	0.0%
Grand Total	139,673	100.0%	29,959	100.0%	360	100.0%

Figure 2.05 shows the age of persons involved in crashes. The largest proportion of crash participants (37%) were aged 15 to 24 years. Individuals over the age of 65 years represented a small proportion of crash participants. However, in the event of a crash, individuals of this age group were 3 times more likely than all other age groups to sustain a fatal injury.

Figure 2.05 Age of Crash Participants, Injured Persons and Fatalities, Utah 1999

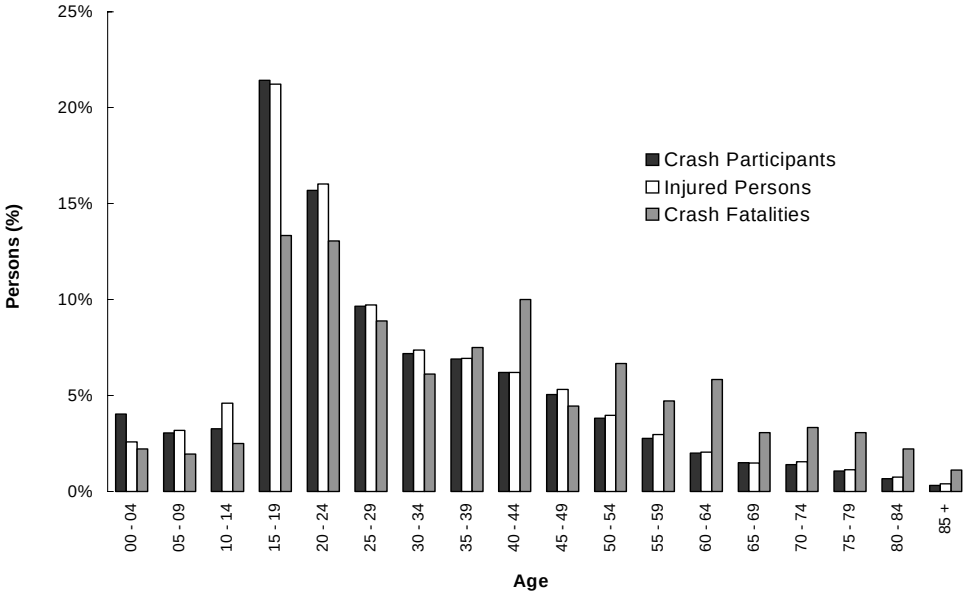


Table 2.05 Age of Crash Participants, Injured Persons and Fatalities, Utah 1999

	Crash Participants		Injured Persons		Crash Fatalities	
Age	#	%	#	%	#	%
00 - 04	5,627	4.0%	775	2.6%	8	2.2%
05 - 09	4,244	3.0%	950	3.2%	7	1.9%
10 - 14	4,570	3.3%	1,379	4.6%	9	2.5%
15 - 19	29,925	21.4%	6,360	21.2%	48	13.3%
20 - 24	21,919	15.7%	4,798	16.0%	47	13.1%
25 - 29	13,489	9.7%	2,911	9.7%	32	8.9%
30 - 34	10,022	7.2%	2,207	7.4%	22	6.1%
35 - 39	9,636	6.9%	2,076	6.9%	27	7.5%
40 - 44	8,665	6.2%	1,857	6.2%	36	10.0%
45 - 49	7,060	5.1%	1,593	5.3%	16	4.4%
50 - 54	5,327	3.8%	1,189	4.0%	24	6.7%
55 - 59	3,866	2.8%	889	3.0%	17	4.7%
60 - 64	2,795	2.0%	615	2.1%	21	5.8%
65 - 69	2,104	1.5%	446	1.5%	11	3.1%
70 - 74	1,944	1.4%	462	1.5%	12	3.3%
75 - 79	1,476	1.1%	337	1.1%	11	3.1%
80 - 84	920	0.7%	226	0.8%	8	2.2%
85 +	437	0.3%	119	0.4%	4	1.1%
Missing	5,647	4.0%	770	2.6%	0	0.0%
Grand Total	139,673	100.0%	29,959	100.0%	360	100.0%

There were 360 crash-related fatalities during 1999. Figure 2.06 shows that over one-quarter of the fatalities (26%) occurred among those aged 15 to 24 years. The largest number of fatalities for both males and females occurred in the 15 to 24 year old age groups.

Figure 2.06 Age and Gender of Fatalities, Utah 1999